



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
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D4855-1

Job Sheet 182655



Part No: D4855-1

Job Qty: 10 ea

Part Name: Antenna Bracket



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 8/29/18

Job Tracking No:

Due Date: 9/21/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV A SHEET 1 IPP REV: A NEW ISSUE JFS 13/06/26 VERIFY BY: DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea	9/21/18	9/21/18	0.00	0.00	Start Up Machining-3		DAS 18/09/18
100	Bandsaw	10 pcs	9/21/18	9/21/18	0.00	0.28	Bandsaw1		52 18/09/18
110	CNC Vertical Machining	10 pcs	9/21/18	9/21/18	0.29	8.77	HAAS1-5		9-89 18/09/18
130	QC	10 pcs	9/21/18	9/21/18	0.00	0.00	QC8 Machining-3		Be 18-09-18
140	HandFinish	10 pcs	9/21/18	9/21/18	0.00	0.40	HandFinish1		SA 18-07-18
150	QC	10 pcs	9/21/18	9/21/18	0.00	0.00	QC7-4		BE 18-09-19
160	Powdercoat	10 pcs	9/21/18	9/21/18	0.00	0.20	Powdercoat1		BE 18-09-19
170	QC	10 pcs	9/21/18	9/21/18	0.00	0.00	QC3		SEP 19 2018 68
180	Packaging	10 pcs	9/21/18	9/21/18	0.00	0.00	Packaging3-2		SEP 20 2018
190	QC21-SA	10 Ea	9/21/18	9/21/18	0.00	0.00	QC21		SEP 20 2018

Part Op 100 - CUT BLANK AT 3.000"

Descriptions: 110 - 1-Machine per folio FB200

160 - START TIME: 9.00

OV.T. 300 - FINISH: 9.35 M 8389B

21

SEP 20 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M6061T6B4.500X4.500	6061-T6 Aluminubar 4.500" X 4.500"	2.5000 ft (.25 ea)	90-Start up Operation	SC80901 5/10399

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M6061T6B4.500X4.500	3	5	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Antenna Bracket	0.875Inches ± 0.010	0.885 0.865		0.869
2	Antenna Bracket	0.201Inches + 0.005 - 0.001	0.206 0.200	Diameter	0.203
3	Antenna Bracket	0.970Inches ± 0.030	1.000 0.940		0.970
4	Antenna Bracket	0.970Inches ± 0.030	1.000 0.940		0.970

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____ Date : _____ Description	DISPOSITION Rework ☐	AGAINST DEPARTMENT/PROCESS Skid-tube Machining ☐ Cross tube Small Fab ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging Supplier ☐ Engineering Quality Other ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																					
		 Part: D4855-1 Job No: 182655 Serial No/Batch: S110400 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: Various STC's		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																																																			
Date: 09/16/18 Dart Aerospace Ltd. 12710 Aberdeen Street Hawthorn, ON K84 1K7 TEL: 1-813-632-5200 Email: sales@dartaero.com www.dartaerospace.com																																																																																																																							
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Environment</td> <td style="width:15%;">☐</td> <td style="width:15%;">No Re-verification</td> <td style="width:15%;">☐</td> <td style="width:15%;">Pressure/Force</td> <td style="width:15%;">☐</td> <td style="width:15%;">Loss/Surge</td> <td style="width:15%;">☐</td> <td style="width:15%;">Positioned Wrong</td> <td style="width:15%;">☐</td> </tr> <tr> <td>Design</td> <td>☐</td> <td>Operator</td> <td>☐</td> <td>Bending</td> <td>☐</td> <td>rogram</td> <td>☐</td> <td>Outside Dimensions</td> <td>☐</td> </tr> <tr> <td>Doc/Data</td> <td>☐</td> <td>Offset/Setup</td> <td>☐</td> <td>Centre Not Concentric</td> <td>☐</td> <td>Grain</td> <td>☐</td> <td>Over/Under tolerance</td> <td>☐</td> </tr> <tr> <td>Equip/Tooling</td> <td>☐</td> <td>Supplier</td> <td>☐</td> <td>Cracks</td> <td>☐</td> <td>Weld</td> <td>☐</td> <td>Part Incorrect</td> <td>☐</td> </tr> <tr> <td>Handling/Pre</td> <td>☐</td> <td>Training</td> <td>☐</td> <td>Crimp/Kink/Ripple/Wave</td> <td>☐</td> <td>Wrong Stock Pulled</td> <td>☐</td> <td>Part Lost/Missing</td> <td>☐</td> </tr> <tr> <td>Material</td> <td>☐</td> <td>Use for Testing</td> <td>☐</td> <td>Cuffs</td> <td>☐</td> <td>Out of Sequence</td> <td>☐</td> <td>Part Moved</td> <td>☐</td> </tr> <tr> <td>Internal Transport</td> <td>☐</td> <td>Poor Information</td> <td>☐</td> <td>Crushing</td> <td>☐</td> <td>Off-set</td> <td>☐</td> <td>Drawing</td> <td>☐</td> </tr> <tr> <td>Tribal Knowledge</td> <td>☐</td> <td>Rushing</td> <td>☐</td> <td>Heat Treat</td> <td>☐</td> <td>Mislabeled</td> <td>☐</td> <td>Finish</td> <td>☐</td> </tr> <tr> <td>LOA</td> <td>☐</td> <td>Product Improvement</td> <td>☐</td> <td>Wave/Twist in Tube</td> <td>☐</td> <td>Fit/Function</td> <td>☐</td> <td>Misread</td> <td>☐</td> </tr> <tr> <td>Substation</td> <td>☐</td> <td>Process Improvement</td> <td>☐</td> <td>Marks/Chatter</td> <td>☐</td> <td>Misaligned/off center</td> <td>☐</td> <td>Turning Sequence</td> <td>☐</td> </tr> <tr> <td>Past Expiry Date</td> <td>☐</td> <td>Manufacturing Process</td> <td>☐</td> <td colspan="6" rowspan="2" style="text-align: center; vertical-align: top;">OTHER :</td> </tr> <tr> <td>Misidentified</td> <td>☐</td> <td>Past Due</td> <td>☐</td> </tr> </table>						Environment	☐	No Re-verification	☐	Pressure/Force	☐	Loss/Surge	☐	Positioned Wrong	☐	Design	☐	Operator	☐	Bending	☐	rogram	☐	Outside Dimensions	☐	Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	Grain	☐	Over/Under tolerance	☐	Equip/Tooling	☐	Supplier	☐	Cracks	☐	Weld	☐	Part Incorrect	☐	Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Material	☐	Use for Testing	☐	Cuffs	☐	Out of Sequence	☐	Part Moved	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Off-set	☐	Drawing	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Mislabeled	☐	Finish	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Fit/Function	☐	Misread	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Misaligned/off center	☐	Turning Sequence	☐	Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						Misidentified	☐	Past Due	☐
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5	Antenna Bracket	1.880Inches ± 0.030	1.910 1.850	1.88
6	Antenna Bracket	3.750Inches ± 0.030	3.780 3.720	3.750
7	Antenna Bracket	0.250Inches ± 0.030	0.280 0.220	Radius 0.250
8	Antenna Bracket	0.257Inches + 0.005 - 0.000	0.262 0.257	Diameter 0.257
9	Antenna Bracket	2.130Inches ± 0.030	2.160 2.100	2.128
10	Antenna Bracket	1.400Inches ± 0.030	1.430 1.370	1.400
11	Antenna Bracket	1.260Inches ± 0.030	1.290 1.230	1.260
12	Antenna Bracket	1.880Inches ± 0.030	1.910 1.850	1.878
13	Antenna Bracket	0.280Inches + 0.006 - 0.001	0.286 0.279	Diameter 0.281
14	Antenna Bracket	0.380Inches ± 0.030	0.410 0.350	Radius 0.380
15	Antenna Bracket	0.380Inches ± 0.030	0.410 0.350	Radius 0.380
16	Antenna Bracket	0.250Inches ± 0.030	0.280 0.220	Radius 0.250
17	Antenna Bracket	0.250Inches ± 0.030 ± 0.005	0.260 0.240	0.252
18	Antenna Bracket	2.500Inches ± 0.030	2.530 2.470	2.500
19	Antenna Bracket	0.250Inches ± 0.010	0.260 0.240	0.248
20	Antenna Bracket	4.250Inches ± 0.030	4.280 4.220	4.250
21	Antenna Bracket	0.250Inches ± 0.030	0.280 0.220	Radius 0.250

Plex 8/29/18 1:29 PM Dart.lajeunesse.marie

DAS
52
9-89

18/09/15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								